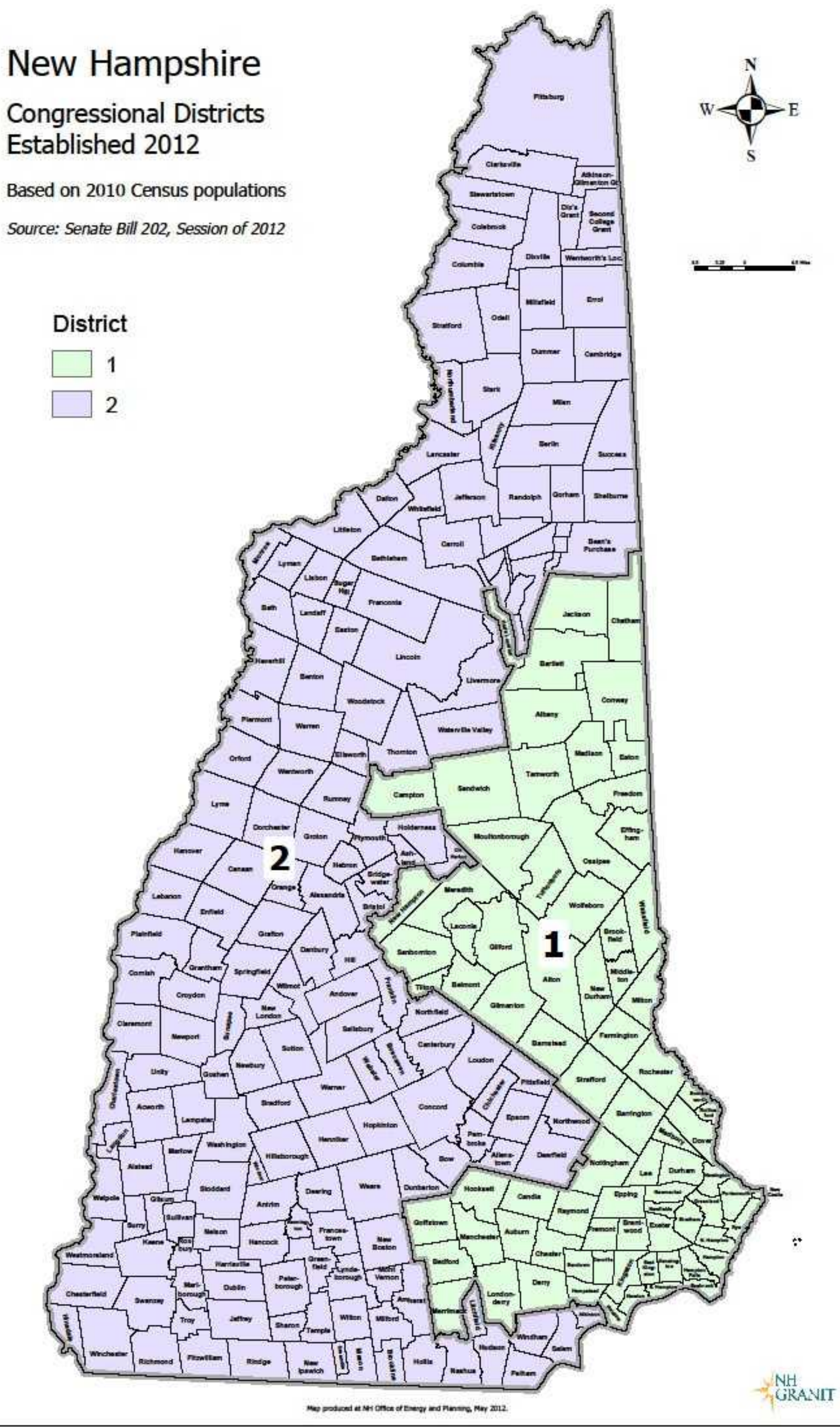


# REDISTRICTING NEW HAMPSHIRE

DELIA O'CONNOR & KAYLA HOLLERAN  
PLYMOUTH STATE UNIVERSITY MATHEMATICS DEPARTMENT

## CURRENT VOTING DISTRICTS



## REDISTRICTING

Forming a base model:

There are 10 counties: Belknap, Carroll, Cheshire, Coos, Grafton, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan. For each demographic, each county will be ranked one a scale of 1 – 10 such that a 1 will be given to the county with the highest population size and 10 for the lowest population size, excluding poverty. Poverty will be ranked such that 1 is the lowest population size and 10 is the largest population size.

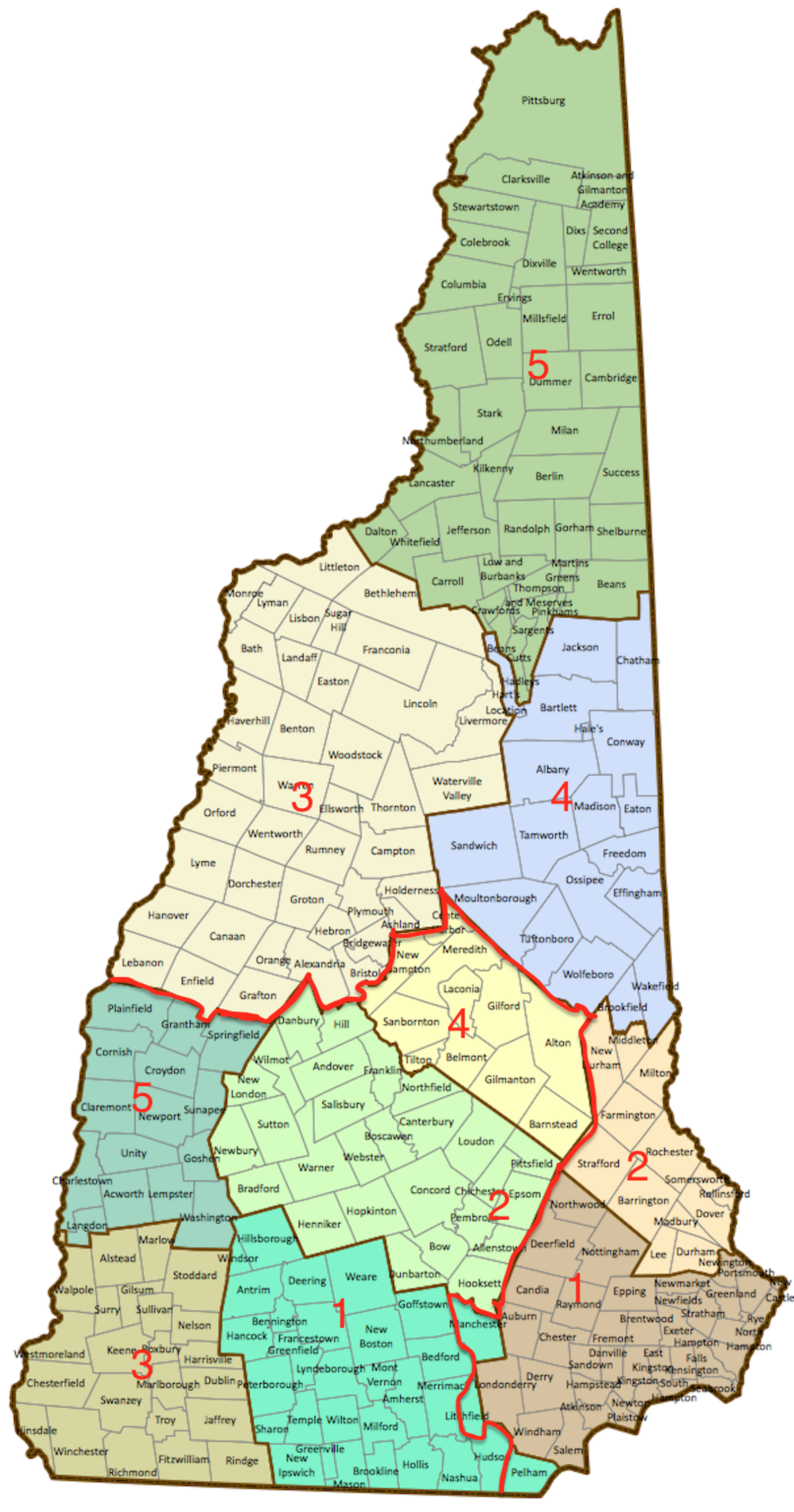
Counties	Population	White	Black/African	Asian	Hispanic/Latino	HS Grad	Bachelors	Income	Poverty
Belknap	7	4	8	7	8	8	8	5	5
Carroll	8	1	10	8	10	3	6	9	6
Cheshire	6	5	7	6	6	6	7	6	9
Coos	10	3	6	10	7	10	10	10	10
Grafton	5	9	4	2	4	5	1	7	8
Hillsborough	1	10	1	1	1	7	3	2	2
Merrimack	3	7	2	5	5	2	4	3	3
Rockingham	2	6	5	4	2	1	2	1	1
Strafford	4	8	3	3	3	4	5	4	7
Sullivan	9	2	9	9	9	9	9	8	4

For each county, the demographic ranks will be averaged. There are 10 counties and 2 districts, thus the averages will be ranked such that a 1 will be given to the lowest two counties and so on until 5. Draw a line dividing the state into two districts containing one county of each rank from 1 – 5. The line will follow county lines.

Average	Rank	County
6.66666667	4	Belknap
6.77777778	4	Carroll
6.44444444	3	Cheshire
8.44444444	5	Coos
5	3	Grafton
3.11111111	1	Hillsborough
3.77777778	2	Merrimack
2.66666667	1	Rockingham
4.55555556	2	Strafford
7.55555556	5	Sullivan

- Upper district has a population of 592,482 and the lower district has a population of 730,134
- Difference in population of 137,652
- Identify district with lower population
- Identify the county that was ranked 1
- Identify towns along the border between districts and add towns to smaller district until populations are nearly equal
- Added Manchester, Litchfield, and Pelham for a population of 130,733
- Difference in population is now 6,919 for a 0.523% difference

## NEW DISTRICTS



## OBJECTIVES AND PREVIOUS INFORMATION

- Previous elections have been distorted by gerrymandering and districts have been formed such that a majority of the counties have been partitioned
- Our main objective in redistricting is to create the most compact districts in a state such that the districts have the same population and the least amount of counties partitioned as possible
- A compact district has the following attributes: smooth boundaries (contorted), few towns sticking out from the center of a central core (dispersion), and a relationship of housing patterns
- New Hampshire has two congressional districts based on town lines
- Data will be based on 2013 demographics
- District 1 has a population of 673,194
- District 2 has a population of 669,601
- Difference in population is now 32,407 for a 2.413% difference
- We consider the demographics: White, Black/African, Asian, Hispanic/Latino, High school graduate, Bachelors degree, Median House Income, and Poverty rate

## ADVANTAGES

This model is recommended over the previous model because the counties are less partitioned and the population difference between districts is significantly reduced. Varying race demographics are taken into account and thus there is less bias. Our new districts have boundaries that are noticeable smoother than the current voting districts. Our districts appear to have less towns sticking out from the central core of the district. The new districts take median house income and poverty rate into account, ergo there is a relationship of housing patterns present in this model.

## WORK CITED

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## OTHER

Email:

dcoconnor@plymouth.edu  
kmholleran@plymouth.edu

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